



AMENDMENTS

In the claims:

Please amend claim 35 to read as follows:

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35. (Twice Amended) A method, comprising:

providing a first doped region;

forming a first doped well within the first doped region;

forming a first doped plug within the first doped well;

forming a second doped plug into the first doped region; and

forming an isolation structure between the first and second doped plugs.

REMARKS

In a Request for Filing Divisional Application dated August 20, 2001, claims 1-34 of the parent application (Serial No. 09/310,288) were cancelled. In a Preliminary Amendment dated August 20, 2001, claim 35 was amended and new claims 44-54 were added. Thus, claims 35-54 remain pending in the present application.

Claims 35-37 and 39-52 were rejected under 35 U.S.C. § 102(e) as being anticipated by Yang (U.S. Patent No. 6,040,603). The Examiner's rejections are respectfully traversed.

Yang is understood to describe forming source and drain regions 305, 307, both having a lightly doped drain regions, using ion implants. Next, a first electrostatic discharge implant 309 is formed such that the electrostatic discharge implant 309 will wholly encompass the source region 305, the drain region 307, and the lightly doped drain regions. A second electrostatic discharge implant 311 having an impurity type opposite to that of the source and drain regions

305, 307 is formed underneath the first electrostatic discharge implant 309. See Yang, col. 2, ll. 44-67 and Figure 3.

In direct contrast to Yang, which teaches that the electrostatic discharge implant 309 will wholly encompass the source region 305, the drain region 307, and the lightly doped drain regions, the present invention describes and claims forming a first doped plug within a first doped well. With particular regard to independent claim 35, Applicants describe and claim providing a first doped region, forming the first doped well within the first doped region, and forming the first doped plug within the first doped well. Independent claim 44 further refines claim 35 by describing providing a p-type semiconductor substrate, forming a first n-well within the p-type semiconductor substrate, and forming a first n-plug within the first n-well. Independent claim 51 also refines claim 35 by claiming forming the first doped plug at a selected location within the first doped well, wherein the selected location is selected to provide a first breakover voltage between the first doped plug and the first doped region. Thus, Applicants respectfully submit that independent claims 35, 44, and 51, and all claims depending therefrom, are not anticipated by Yang and request that the Examiner's rejections of claims 35-37 and 39-52 under 35 U.S.C. § 102(e) be withdrawn.

Moreover, it is respectfully submitted that claims 35-37 and 39-52 are not obvious in view of Yang. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. That is, there must be something in the prior art as a whole to suggest the desirability,

and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. Third, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. A recent Federal Circuit case emphasizes that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002) (copy attached). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

As discussed above, Yang does not teach or suggest forming the first doped plug within the first doped well. There is also no suggestion or motivation in Yang for modifying the prior art in the manner proposed by the Examiner, *i.e.* forming the first doped plug within the first doped well. In fact, Yang teaches away from the Examiner's proposed modification by teaching that the electrostatic discharge implant 309 will wholly encompass the source region 305, the drain region 307, and the lightly doped drain regions.

Claim 54 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Yang, as applied to claim 51 above, and further in view of Pilling et al. (hereinafter Pilling (U.S. Patent No. 5,838,624)). The Examiner's rejections are respectfully traversed.

The Examiner relies on Pilling to teach an anti-fuse network that is susceptible to damage from electrostatic discharge. However, Pilling does not remedy the fundamental deficiencies in Yang, as described above. Thus, for at least the aforementioned reasons, Applicants respectfully submit that claim 54 is not anticipated by Yang in view of Pilling and request that the Examiner's rejection be withdrawn.

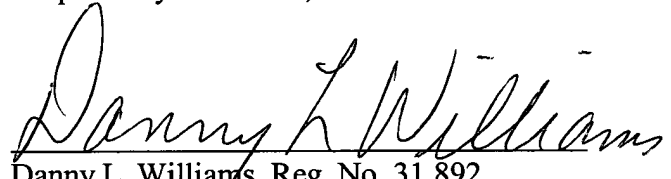
Claims 47 and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Yang as applied to claims 44 and 51 above, and further in view of Matsukawa (U.S. Patent No. 5,182,227).

The Examiner relies on Matsukawa to teach using a LOCOS oxide to isolate electrical components on a substrate. However, Matsukawa does not remedy the fundamental deficiencies in Yang, as described above. Thus, for at least the aforementioned reasons, Applicants respectfully submit that claims 47 and 53 are not anticipated by Yang in view of Matsukawa and request that the Examiner's rejection be withdrawn.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Houston, Texas telephone number (713) 934-4060 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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